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Full name: Dr. Albert M. Manville, II

Wildlife Biologist, Branch of Bird Conservation

Division of Migratory Bird Management

U.S. Fish & Wildlife Service

Address: 4401 N. Fairfax Dr., MBSP-4107

Arlington, VA 22203

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cc: Mr. Louis Peraertz, Esq.

Spectrum and Competition Policy Division
Federal Communications Commission

Dear Staff of the Federal Communications Commission:

The Division of Migratory Bird Management (DMBM), U.S. Fish & Wildlife Service (FWS or Service), is pleased to provide the following reply comments. These respond to specific comments submitted last month regarding recommendations to reduce migratory bird collisions with communication towers submitted by Avatar Environmental, LLC (Avatar). Our reply comments follow a process initiated by a Notice of Inquiry (NOI), published by the Federal Communications Commission (FCC) in August 2003 – In the Matter of Effects of Communication Towers on Migratory Birds. The Service provided detailed public comments and suggestions on this document in 2003 following its publication, and we provided comments on Avatar's report on February 11, 2005.

DMBM is particularly interested in replying to the February 14, 2005, comments submitted by Drs. Travis Longcore, Sidney A. Gauthreaux, and Ms. Catherine Rich on behalf of the Land Protection Partners (LPP) entitled, "Scientific basis to establish policy regulating communications towers to protect migratory birds: response to Avatar Environmental, LLC, report regarding migratory bird collisions with communication towers, WT Docket No. 03-187, Federal Communications Commission Notice of Inquiry." In our opinion, the LPP comments provide a detailed and scientifically-sound analysis of current avian-communication tower interactions.

LPP raised the issue that the Avatar Report failed to cite current estimates for avian mortality at communication towers. DMBM acknowledges Avatar's failure to include the Service's most current estimated range of mortality from communication towers. Specifically, Manville (2001) conservatively estimated avian mortality at 4-5 million birds/year, recognizing that mortality could range to a high of 40-50 million birds/year, with only cumulative impact studies assessing the true magnitude of the problem.

LPP clearly characterized the issue of "biological significance" to avifauna, especially based on 2003 comments to the NOI provided by the Cellular Telecommunications & Internet Association (CTIA), as an issue founded not on science but rather on a statutory standard under the National Environmental Policy Act (NEPA). We concur with this analysis. The Avatar Report, however, did not outline the standards used by the FCC to determine significance (LPP p. 4). LPP indicated that the report prepared for the communications industry by Woodlot Alternatives produced an annual estimate for avian mortality for all birds, not for particular species or populations (LPP p. 5). The Service concurs that this is a flawed approach. Impacts must be assessed on a species-specific or population-specific basis.

In Section 2.1 of the LPP Report, "Estimate of numbers of birds killed at towers by species," LPP took the list of the top 10 birds killed per year at communication towers, and estimated mortality for each species using the Service's low-end estimate of 4 million and high-end estimate of 40 million birds of all species killed per year. This novel approach, even at the 4-million bird level, results in some telling statistics. Looking only at the top 10 bird species for which mortality has been documented at communication towers, mortality is estimated to range from 490,000 to 4.9 million birds for each of the 10 bird species based on annual mortality estimates developed by FWS! The population impacts to migratory songbirds (and other avifauna) and impacts to their population status are frightening and biologically significant. LPP referenced the Sillett and Holmes (2002) long-term study on the migrant Black-throated Blue Warbler. The Sillett and Holmes study showed a survival rate during the migratory period of only 67-73%, compared to 99% (+ 1%) summer survival and 93% (+ 5%) winter survival, raising concerns about the increased number of communication towers and their impacts to this species during migration. For Federally-listed species, such as the Kirland's Warbler, whose total estimated population numbers only 2,000 breeding individuals, tower mortality could be significant to the entire population. We therefore concur with LPP's recommendation to include all migratory birds as part of the FCC's NEPA analysis process (LPP p. 5). The Service first raised this concern at our 1999 public workshop on avian collisions at communication towers, held at Cornell University.

In Section 3, "Tower height affects bird mortality rate," LPP analyzed the relationship between tower height and the number of avian fatalities. In Section 3.1, they then investigated the relationship between tower height (including lit and unlit towers) and bird deaths, resulting in a regression analysis of significance. As a result of their analysis, LPP concluded that towers lower than 200 feet, with no FAA obstruction lighting, provided a 90-95% reduction in bird mortality. This recommendation, coincidently, parallels the Service's second voluntary recommendation made in 2000, for siting and constructing towers. That is, if communication antennas cannot be collocated on other structures, keep them unguyed, unlit, and under 200 feet.

LPP (p. 17) cited the fall 2004 results of the Gehring, Michigan, tower study. While these findings are

very preliminary, they further reinforce Service concerns about guy wires. Dr. Gehring determined that guyed towers (N=12) killed nearly 10 times as many birds as did unguyed (N=9) towers in Michigan during the fall 2004. The study will continue for at least another 2 years.

LPP has provided a detailed and highly credible meta-analysis of lighting impacts to migratory birds (pp. 18-29). Without recapping all the key points presented by LPP, the Service acknowledges LPP's support of our lighting recommendation No. 5 included in our voluntary guidance. We are pleased to see the results of the Gauthreaux and Belser (2005) lighting study now published, which further support our lighting recommendation. We especially appreciate LPP's support of our guidance where they conclude that the Service's communication tower guidelines "... have a strong scientific basis, and their applicability has been demonstrated by research available at the time they were issued in 2000, or completed since then" (LPP p. 31).

In conclusion, paralleling recommendations made by LPP and suggestions previously made by the Service, we recommend the following:

- While avian-tower research is critically important, much more study needs to be systematically conducted on towers nationwide. This should include more research into lighting, deterrents, guys, height, topography and the interrelationship of these variables in affecting migratory birds.
- Where possible, all research protocols for tower studies should be peer-reviewed and the results published in credible, scientific journals.
- Since 2004, the Federal Aviation Administration has recommended that all their regions use the Service's voluntary lighting protocol for white strobe lights as a replacement for incandescent lights. The FCC needs to take similar action for all lighted towers they license.
- The FCC should endorse the Service's voluntary tower guidelines issued in 2000, strongly encouraging the industry to collocate antennas on existing structures while constructing shorter towers. These actions should not compromise communication needs.
- The FCC should endorse a nationwide study assessing the cumulative impacts of communication towers on migratory birds.

We hope all these aforementioned issues can be discussed in upcoming meetings of the Communication Tower Working Group's (CTWG) Research Subcommittee on April 21, 2005, and at a future meeting of the CTWG.

Respectfully submitted,

/s/

Albert M. Manville, II, Ph.D.
Wildlife Biologist,
Division of Migratory Bird Management
U.S. Fish & Wildlife Service